Amendments to the CLAIMS

Claims 1-13 (Cancelled)

14. (Currently amended) A pharmaceutical parathyroid hormone (PTH) antagonist composition, wherein the PTH antagonist composition comprises a peptide exhibiting PTH antagonist activity, together with a pharmaceutical carrier or excipient, wherein the PTH antagonist comprises a contiguous portion of human PTH having an amino acid sequence set forth in SEQ ID NO:1 (PTH_{1-84}), and has the following characteristics:

a) the N-terminal amino acid residue of the PTH antagonist starts at any position spanning from position ~~8~~ 9 through position 34 of SEQ ID NO:1 (PTH_{1-84}); and

b) the C-terminal amino acid residue of the PTH antagonist ends at position 84 of SEQ ID NO:1 (PTH_{1-84}).

15. (Cancelled)

16. (Previously presented) The antagonist of claim 14, wherein the PTH antagonist is selected from the group consisting of SEQ ID NO:5 (PTH_{28-84}) and SEQ ID NO:3 (PTH_{34-84}).

Claims 17-38 (Cancelled)

39. (Currently amended) A method for reducing ~~an anabolic~~ a catabolic effect of a parathyroid hormone (PTH) on bone in a subject diagnosed with excessive PTH activity, comprising administering to a subject a PTH antagonist peptide in an effective, but non-toxic amount, wherein the PTH antagonist comprises a contiguous portion of human PTH having an amino acid sequence set forth in SEQ ID NO:1 (PTH_{1-84}), and has the following characteristics:

a) the N-terminal amino acid residue of the PTH antagonist starts at any position spanning from position 2 through position 34 of SEQ ID NO:1 (PTH_{1-84}); and

b) the C-terminal amino acid residue of the PTH antagonist ends at position 84 of SEQ ID NO:1 (PTH_{1-84}),

whereby the ~~anabolic~~ catabolic effect of a PTH on bone in the subject is reduced.

40. (canceled)

41. (Previously presented)) The method of claim 39, wherein the PTH antagonist is selected from the group consisting of SEQ ID NO:2 (PTH_{2-84}), SEQ ID NO:4 (PTH_{3-84}), PTH_{7-84}, SEQ ID NO:5 (PTH_{28-84}), and SEQ ID NO:3 (PTH_{34-84}).

42. (Previously presented) The method of claim 39, wherein the PTH antagonist is administered together with a pharmaceutical carrier or excipient.

43. (Previously presented) The method of claim 39, wherein the PTH antagonist administration is either in a continuous or in a pulsatile manner.

44. (Previously presented) The method of claim 39, wherein the subject is afflicted with hyperparathyroidism.

45. (Previously presented) The method of claim 39, wherein the subject is afflicted with renal osteodystrophy.

46. (Previously presented) The method of claim 39, wherein the subject is afflicted with osteoporosis.

47. (Currently amended) The method of claim 39, wherein the PTH antagonist has ~~the~~ a further effect of decreasing the *in vivo* calcium ion concentration in the blood of the subject or the PTH antagonist has a further effect of countering hypercalcemia in the subject.

48. (Currently amended) The method of claim 39, wherein the PTH antagonist has ~~the~~ a further effect of blocking a PTH binding site on a PTH receptor, without concomitant activation of the PTH receptor in the subject.